



UNITED STATES PATENT AND TRADEMARK OFFICE

Cen

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,028	09/05/2003	Paul L. Camwell	A891743US	6038
37047	7590	11/27/2007	EXAMINER	
GOWLING LAFLEUR HENDERSON LLP SUITE 1400, 700 2ND ST. SW CALGARY, AB T2P 4V5 CANADA			CAVALLARI, DANIEL J	
			ART UNIT	PAPER NUMBER
			2836	
			MAIL DATE	
			DELIVERY MODE	
			11/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/655,028	CAMWELL ET AL.	
	Examiner	Art Unit	
	Daniel Cavallari	2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 13 September 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 6-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 6-16 is/are allowed.
- 6) Claim(s) 18-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

The Examiner acknowledges the amendments submitted 9/13/2007. The amendments to claim 18, cancellation of claim 17 and new claims 19 & 20 are accepted.

Response to Arguments

Applicant's arguments with respect to claims 18-20 have been considered but are moot in view of the new ground(s) of rejection.

As a preliminary matter, the Examiner notes that Claim 18 presented in the Remarks on page 10 does not match the claim presented in the amended claims. Particularly, claim 18 in the remarks states "A coaxial multiconductor plug..." whereas the actual amended claim 18 recites "A multiconductor plug" wherein the same discrepancy has been made between the remarks in regard to new claims 19 & 20.

The Examiner further notes that since the amendments to the claims change their scope, this action is Final as necessitated by amendment.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahasi (US 6,192,435) and Wood (US 5,726,506).

In regard to Claims 18

Takahasi teaches:

A multi-conductor plug (30) and socket (20) means arrangement (See Figure 2) said plug and socket means sharing a common axis (See Figure 2 and note how the male and female sockets align forming a common axis), each with a plurality of contacts, read on by the female and male pins (See Column 4, Line 65 to Column 5, Line 9) comprising:

- A first plug (30) contact (topmost) of said plug contacts electrically coupled to a first simple electronic device (read on by the wiring connecting the wire connecting the plug to the line Vi) and at least one other electrical contact (second from the topmost contact) electrically coupled to an isolation means, read on by switch (SW1) which is activated upon full engagement of the plug and socket arrangement (See Column 9, Lines 53-67).
- A first socket contact electrically coupled to a second simple electronic device (read on by the wiring connecting the wire connecting the plug to the line Vi when the plug and socket are connected), and at least one other contact electronically coupled to an electronic isolation means, read on by switch (10).
- The socket isolation means (10) activated only when the second simple electronic device is detected by full engagement permitting current flow from the

contacts which is activated upon full engagement of the plug and socket arrangement (See Column 4, Lines 43-50 & Column 7, Line 56 to Column 8, Line 58).

Takahasi fails to teach wherein the simple electronic device above is a diode isolating the plug and socket via diodes. However, Wood teaches a connector arrangement in which the power supply (PS) and load side (LOAD) comprise protective diodes (See Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate power supply side (socket side) and load side (plug side) diodes on the power supply line and load lines of the plug and socket connector as taught by Takahasi (See Figure 2 & See Column 4, Lines 43-50 & Column 7, Line 56 to Column 8, Line 58). The motivation would have been to protect the circuits against reverse current (See Column 4, Lines 54-64).

In regard to Claim 19

A multi-conductor plug (30) and socket (20) (See Figure 2) arrangement comprising:

- A pair of plug contacts, read on by the upper two pins of plug (30) (See Figure 2).
- Socket isolation means (10).
- At least one socket contact electrically coupled to said socket isolation means (as is the case when the plug and socket are connected).
- Wherein said plug and contact means share a common axis and wherein upon full engagement of said plug and socket means arrangement and upon current

being detected, said socket means (1) is activated (See Figure 2 & See Column 4, Lines 43-50 & Column 7, Line 56 to Column 8, Line 58).

Takahashi fails to teach:

- A diode electrically coupled to said pair of plug contacts.

However, Wood teaches a connector arrangement in which the power supply (PS) and load side (LOAD) comprise protective diodes (See Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate power supply side (socket side) and load side (plug side) diodes on the power supply line and load lines of the plug and socket connector as taught by Takahashi (See Figure 2 & See Column 4, Lines 43-50 & Column 7, Line 56 to Column 8, Line 58). The motivation would have been to protect the circuits against reverse current (See Column 4, Lines 54-64).

In regard to Claim 20

Takahashi fails to teach:

- A diode electrically coupled to said pair of socket contacts.

However, Wood teaches a connector arrangement in which the power supply (PS) and load side (LOAD) comprise protective diodes (See Figure 1).

- It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate power supply side (socket side) and load side (plug side) diodes on the power supply line and load lines of the plug and socket connector as taught by Takahasi (See Figure 2 & See Column 4, Lines 43-50 & Column 7, Line 56 to Column 8, Line 58). The motivation would have been to protect the circuits against reverse current (See Column 4, Lines 54-64).

Allowable Subject Matter

Claims 6-16 are allowed for reasons indicated in the Office Action of 1/22/2007.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2836

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

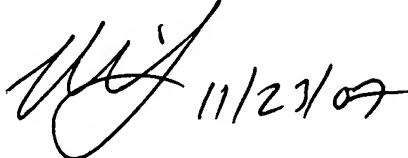
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Cavallari whose telephone number is 571-272-8541. The examiner can normally be reached on Monday-Friday 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (571)272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daniel Cavallari

November 21, 2007



11/21/07

MICHAEL SHERRY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800